

Report No.: 01

Test Time: 2015/11/30 15:58

## Luminaire Property

Luminaire Manufacturer: Acolyte

Luminaire Category: RB245.5RGBW-Green

Luminaire Description: RB245.5RGBW-Green

Number of Lamps: 1

Luminous Width (mm): 12

Voltage: 24.0 V

Power: 2.90 W

Luminous Length (mm): 500

Luminous Height (mm): 5

Current: 0.121 A

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 139.5 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H123.1

Vertical Diffuse Angle(50%): V122.8

Luminaire Efficacy Rating (LER): 48

Max. Intensity: 42.87 cd

Total Rated Lamp Lumens: 139.5 lm

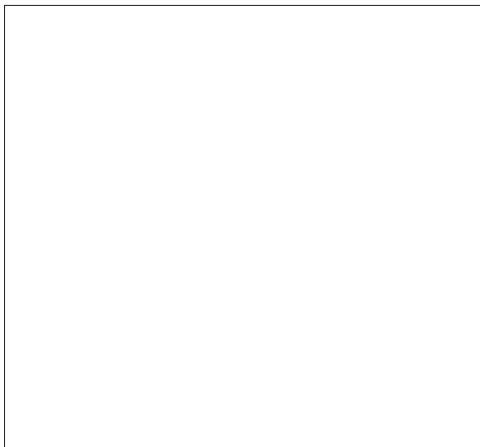
Efficiency: 100%

Upward Ratio: 1%

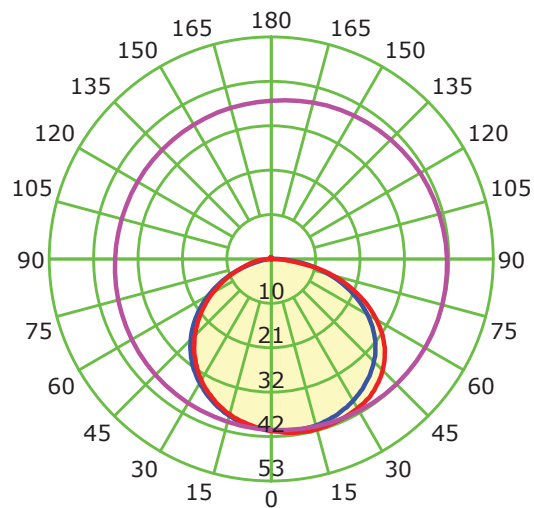
Central Intensity: 41.44 cd

Pos of Max. Intensity: H60 V19

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270 — G19

C Plane (°):0.0-360.0: 10.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 24°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

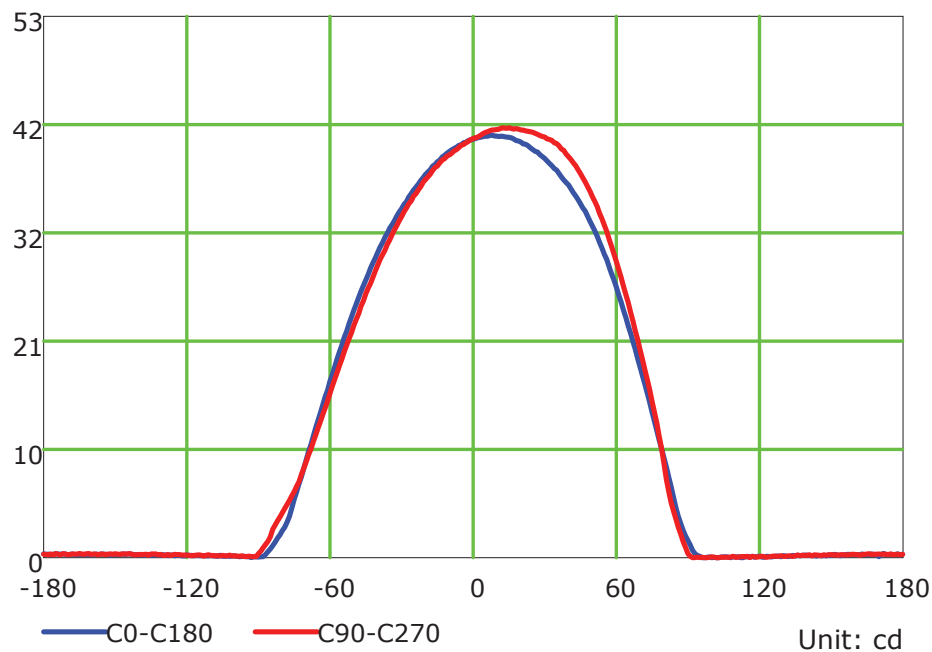
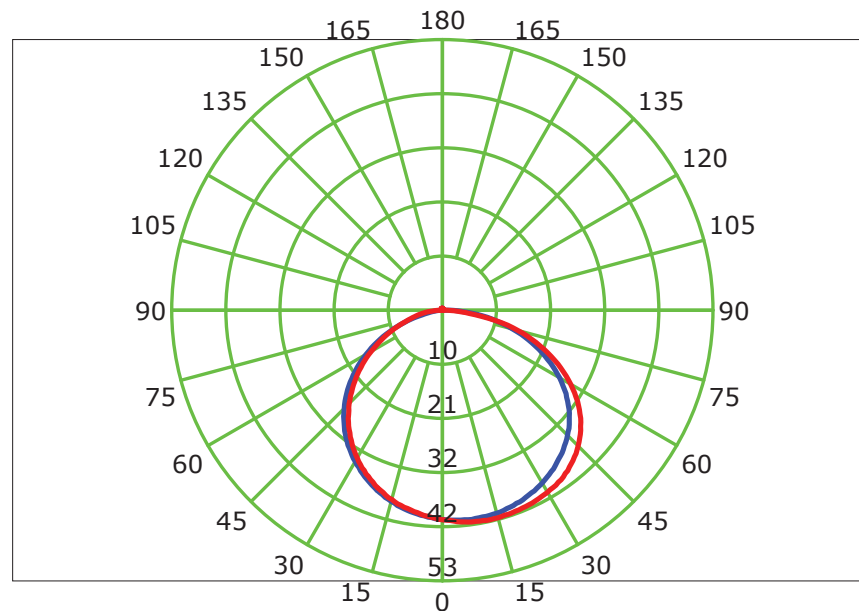
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Luminous Intensity Distribution Curve



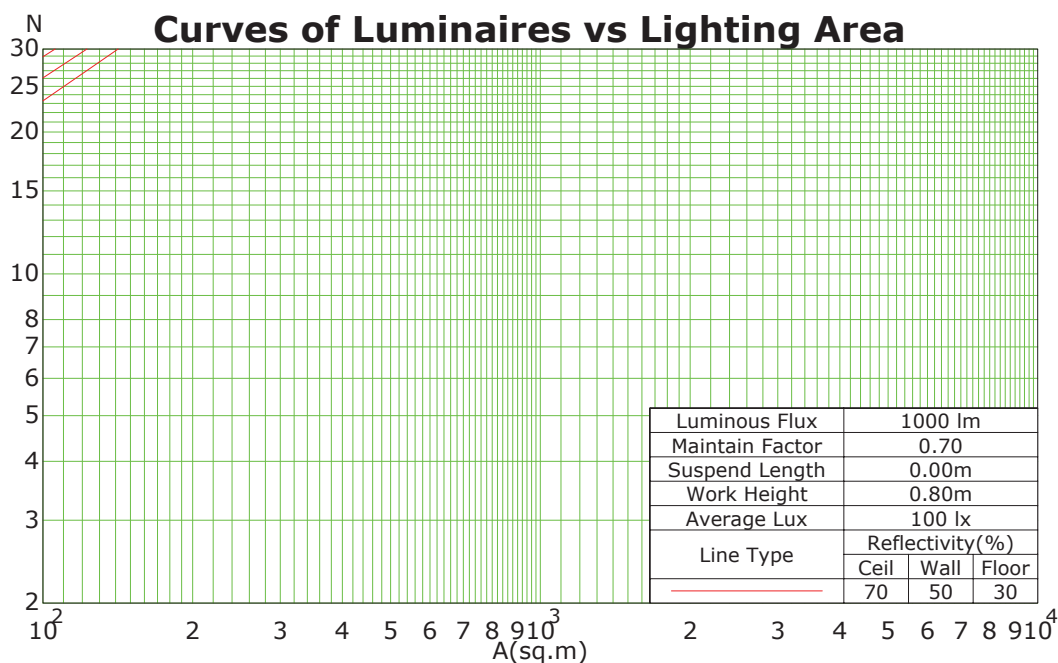
C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

### Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	83	81
2	97	89	81	75	95	87	80	74	83	77	72	79	75	71	76	72	69	67
3	88	77	69	62	86	76	68	61	72	66	60	69	64	59	67	62	58	55
4	81	68	59	52	78	67	58	51	64	56	51	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	49	43	37	48	42	37	35
7	63	49	40	34	61	48	40	33	46	39	33	45	38	33	43	37	32	30
8	59	45	36	30	57	44	35	30	42	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	30	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	23	22

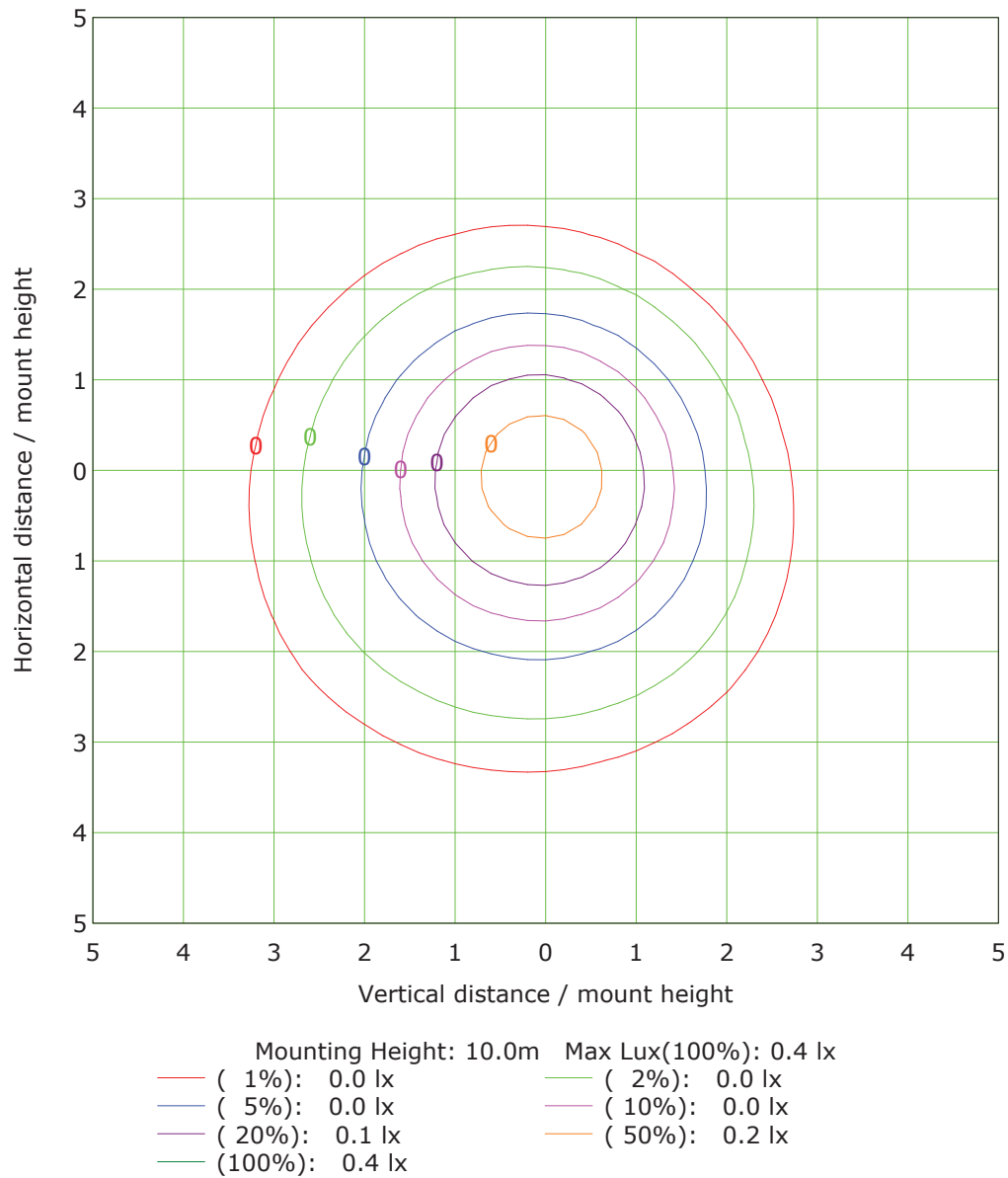
Spacing Criteria (0-180): 1.33  
Spacing Criteria (90-270): 1.35  
Spacing Criteria (Diagonal): 1.48



C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## IsoLux Plot

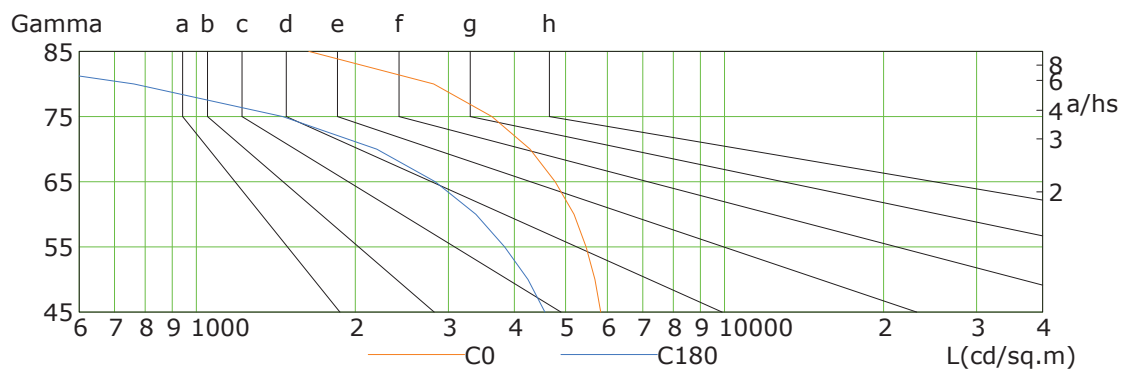
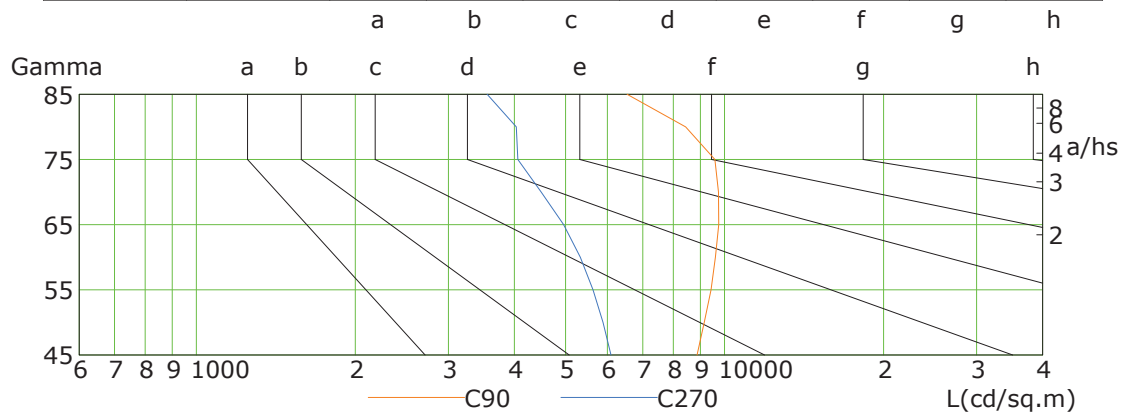


C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

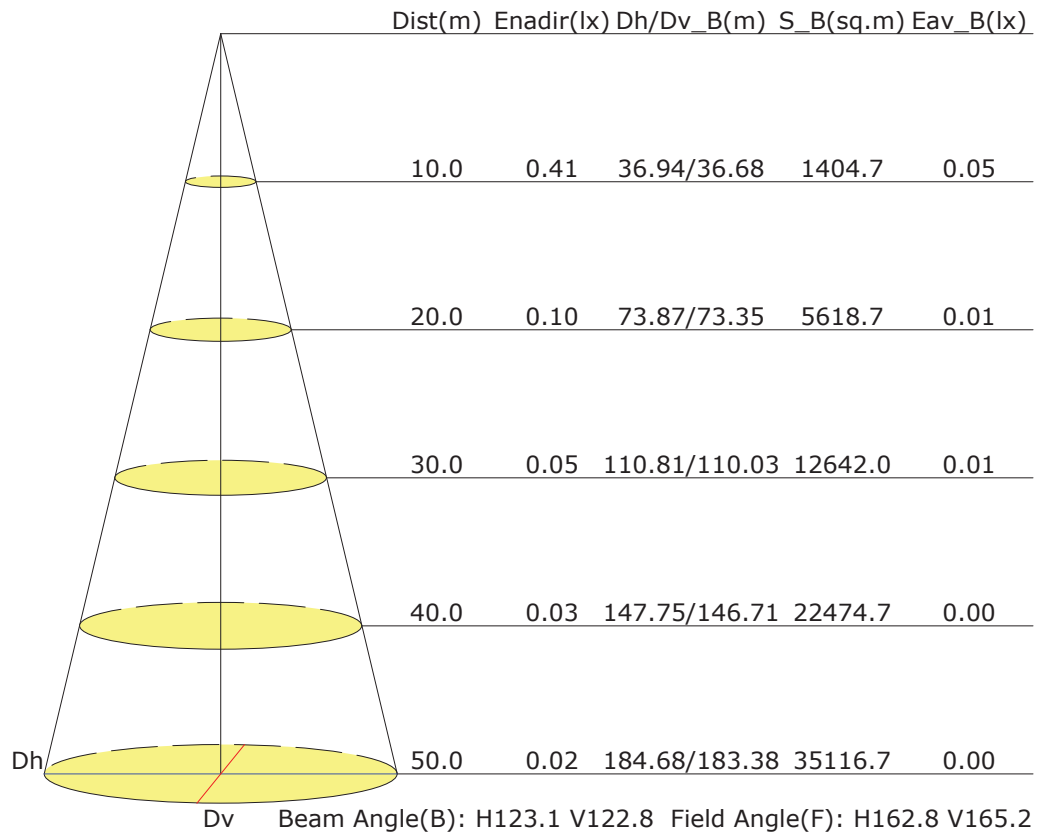


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5827	5684	5469	5189	4778	4283	3627	2814	1633
C90	8868	9153	9425	9607	9749	9737	9585	8438	6538
C180	4570	4245	3833	3382	2832	2195	1457	762	289
C270	6096	5888	5635	5331	4957	4496	4060	4033	3552

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Temperature: 24°C  
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Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

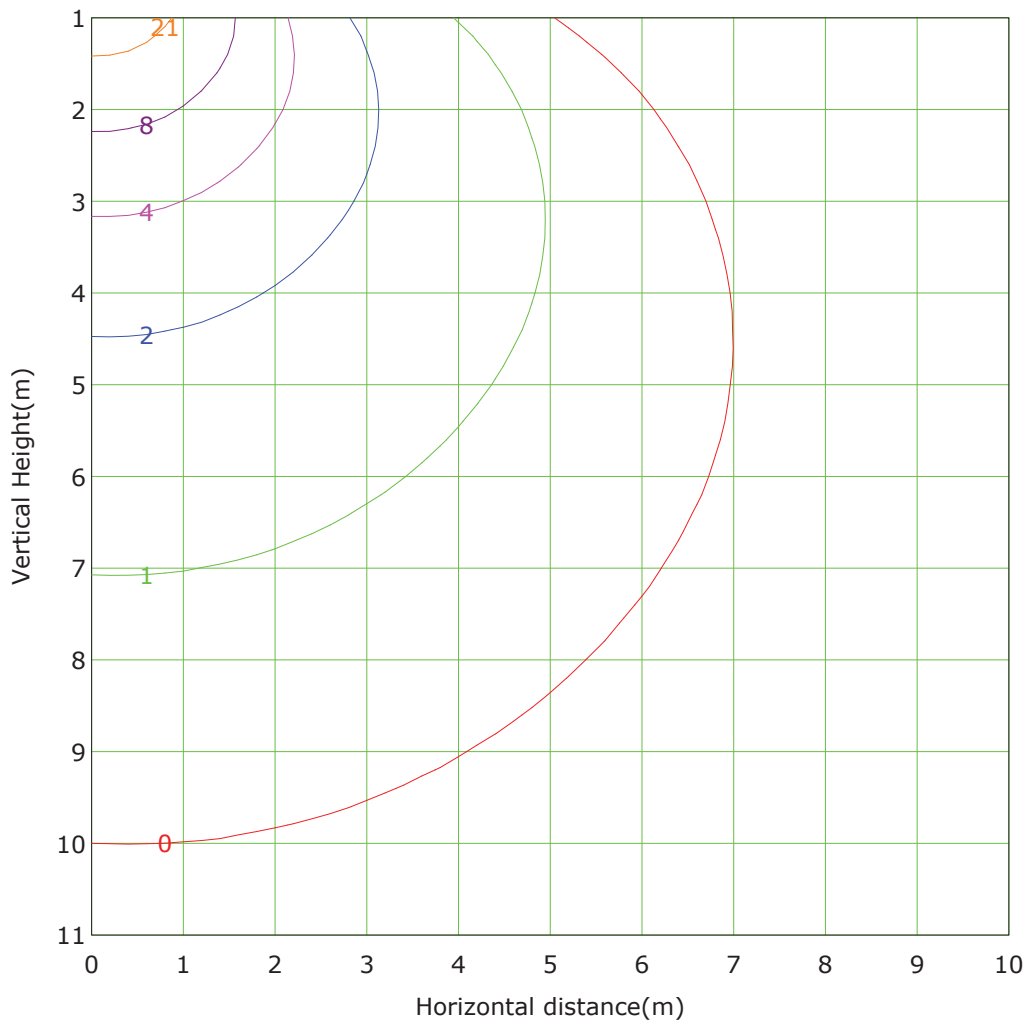
## Illuminance at a Distance



C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 41.4 lx  
 ( 1%): 0.4 lx    ( 2%): 0.8 lx  
 ( 5%): 2.1 lx    ( 10%): 4.1 lx  
 ( 20%): 8.3 lx    ( 50%): 20.7 lx  
 (100%): 41.4 lx

C Plane (°):0.0-360.0: 10.0  
 Test Lab: ACOLYTE  
 Test Type: TYPE C  
 Temperature: 24°C  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Area Flux Table

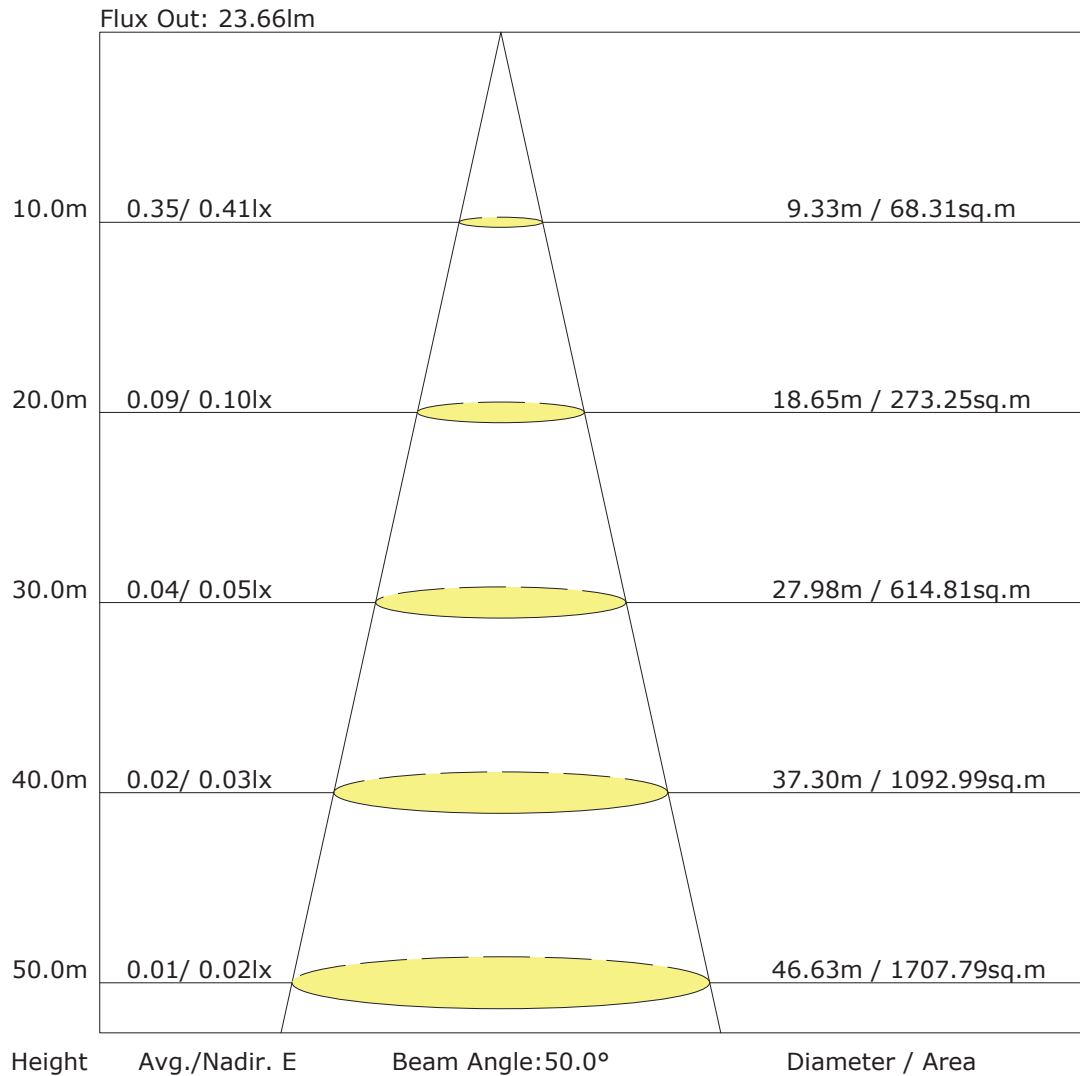
Unit: Im																			
-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.7	0.0
-80	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	1.9	1.6
-70	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.0	3.5	3.4
-60	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.1	0.0	5.4	5.4
-50	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.8	0.7	0.6	0.5	0.3	0.2	0.1	7.2	7.2
-40	0.0	0.0	0.1	0.2	0.4	0.6	0.7	0.9	0.9	1.0	0.9	0.9	0.7	0.6	0.4	0.2	0.1	8.7	8.7
-30	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.1	1.0	0.8	0.7	0.4	0.3	0.1	10.0	10.0
-20	0.0	0.0	0.2	0.3	0.5	0.7	0.9	1.1	1.2	1.2	1.1	1.0	0.9	0.7	0.5	0.3	0.1	10.9	10.9
-10	0.0	0.0	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.2	1.1	0.9	0.7	0.5	0.3	0.1	0.0	11.5	11.4
0	0.0	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.3	1.2	1.1	1.0	0.8	0.5	0.3	0.1	11.8	11.8
10	0.0	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.3	1.3	1.1	1.0	0.8	0.5	0.3	0.1	12.0	12.0
20	0.0	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.3	1.2	1.1	1.0	0.8	0.5	0.3	0.1	11.8	11.8
30	0.0	0.0	0.2	0.3	0.6	0.8	1.0	1.2	1.3	1.3	1.2	1.1	0.9	0.7	0.5	0.3	0.1	11.3	11.3
40	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.1	1.2	1.2	1.1	1.0	0.9	0.7	0.4	0.2	0.1	10.4	10.4
50	0.0	0.0	0.1	0.2	0.4	0.6	0.8	0.9	1.0	1.0	0.9	0.7	0.6	0.4	0.3	0.2	0.1	8.9	8.8
60	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.7	0.7	0.6	0.4	0.3	0.2	0.1	6.7	6.7
70	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0	4.1	4.0
80	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	1.3	0.8
90	0.0	0.5	1.8	3.9	6.6	9.3	11.8	13.7	14.8	15.2	14.8	13.6	11.6	9.1	6.2	3.5	1.4	138	
Flux(T)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flux(E)	0.0	0.3	1.7	3.8	6.5	9.2	11.6	13.5	14.7	15.1	14.7	13.5	11.5	9.0	6.2	3.4	1.3	0.2	136
-90	-80 <td>-70<td>-60<td>-50<td>-40<td>-30<td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	-70 <td>-60<td>-50<td>-40<td>-30<td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	-60 <td>-50<td>-40<td>-30<td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	-50 <td>-40<td>-30<td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	-40 <td>-30<td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td></td>	-30 <td>-20<td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td></td>	-20 <td>-10<td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td></td>	-10 <td>0<td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td></td>	0 <td>10<td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td></td>	10 <td>20<td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td></td>	20 <td>30<td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td></td>	30 <td>40<td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td></td>	40 <td>50<td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td></td>	50 <td>60<td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td></td>	60 <td>70<td>80<td>90</td><td>Flux(T)Flux(E)</td></td></td>	70 <td>80<td>90</td><td>Flux(T)Flux(E)</td></td>	80 <td>90</td> <td>Flux(T)Flux(E)</td>	90	Flux(T)Flux(E)
Horizontal plane																			
Vertical plane																			

C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	26.5	28.2	26.9	28.5	28.9	26.2	27.8	26.5	28.2	28.5
3H	28.7	30.3	29.1	30.6	31.0	28.0	29.5	28.4	29.9	30.2
4H	29.7	31.1	30.1	31.5	31.9	28.7	30.1	29.1	30.5	30.9
6H	30.4	31.8	30.8	32.1	32.5	29.1	30.4	29.5	30.8	31.2
8H	30.7	32.0	31.1	32.4	32.8	29.2	30.5	29.6	30.9	31.3
12H	30.9	32.2	31.4	32.6	33.0	29.2	30.4	29.7	30.8	31.3
X=4H Y=2H	27.1	28.5	27.5	28.9	29.3	26.9	28.3	27.3	28.7	29.1
3H	29.5	30.7	29.9	31.1	31.5	28.9	30.1	29.4	30.6	31.0
4H	30.5	31.6	31.0	32.1	32.5	29.7	30.8	30.2	31.3	31.7
6H	31.4	32.4	31.9	32.8	33.3	30.3	31.3	30.8	31.7	32.2
8H	31.8	32.7	32.2	33.1	33.6	30.4	31.3	30.9	31.8	32.2
12H	32.0	32.9	32.5	33.4	33.8	30.5	31.3	31.0	31.8	32.3
X=8H Y=4H	30.8	31.7	31.3	32.1	32.6	30.1	31.0	30.6	31.5	32.0
6H	31.8	32.5	32.3	33.0	33.5	30.8	31.5	31.3	32.0	32.5
8H	32.2	32.9	32.7	33.4	33.9	30.9	31.6	31.5	32.1	32.6
12H	32.6	33.2	33.1	33.7	34.3	31.1	31.7	31.6	32.2	32.7
X=12H Y=4H	30.8	31.6	31.3	32.1	32.6	30.2	31.0	30.6	31.5	31.9
6H	31.8	32.5	32.4	33.0	33.6	30.9	31.5	31.4	32.0	32.6
8H	32.3	32.9	32.8	33.4	34.0	31.1	31.7	31.6	32.2	32.8

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 10.0  
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